REMARKS

Claims 1-42 are pending in the application. Claims 1, 30, 38, 40 and 42 are currently amended.

Claim Rejections - 35 USC 102

The Examiner rejected claims 1 -42 under 35 USC 102(e) as being anticipated by Ferstenberg et al (U.S. Patent No. 6,968,318). The claims have been amended to better define the present invention in a way that overcomes the Examiner's rejections.

Ferstenberg relates to a central exchange, such as NASDAQ, where participants exchange *commodities* via an electronic intermediary. There is a hint at, but no clear disclosure of, direct negotiation between two e-agents as a simple case. However there is no hint that such direct negotiation is to be carried out in accordance with the features of the present claims, as explained below.

In Ferstenberg, a direct relationship allowing complex interaction, whether a relationship of trading or of negotiation, between individual participants, is not set up, but rather the electronic intermediary obtains a quantity of items from a totality of sellers and attempts to allocate the commodities amongst a totality of buyers while meeting various market targets. See column 37 lines 6 – 10 where *eagent* offers are counted by *intermediary* counter offers. In contrast, the present invention concerns negotiations between two parties where the parties positions are expressed via intentions, and do not necessarily involve commodities.

Each of the independent claims have been amended to make clear that it is user parties and not an intermediary who take part in negotiation steps, and that direct negotiations are carried out between user parties to arrive at a common user intention, which is made up of the unification of two or more individual user

intentions. A common user intention is not taught or hinted at in Ferstenberg as it is not clear how his exchange system would work without an intermediary.

Considering the wording of amended claim 1, there is taught a method for at least semi-automatically directly negotiating a relationship between at least a first user party and a second user party without an intermediary, the method being performed by a data processor, the method comprising:

- (a) providing a first intention for the first user party and a second intention for the second user party, each of said first intention and said second intention featuring a plurality of components;
- (b) exchanging at least one dispatch between the first user party and the second user party, said at least one dispatch including a reference to a value for at least one of said plurality of components;
- (c) altering at least one of said first intention for the first user party and said second intention for the second user party according to said reference to said value in said at least one dispatch, said altering comprising merging at least a portion of said first user intention and at least a portion of said second user intention to form a merged user intention;
- (d) comparing said first user intention to said second user intention; and
- (e) if said first user intention matches said second user intention, determining the relationship according to said merged user intention.

In respect of feature b) messages are exchanged between the first user party and the second user party. Ferstenberg by contrast teaches only exchange between user parties and the electronic intermediary. Positive teaching of the "user" party is believed to have excluded the possibility of admitting the electronic intermediary as one of the parties. Although Ferstenberg hints at direct negotiation in the simple case there is no direct teaching of feature b.

In respect of feature c) the claim requires a merged user intention formed by merging the intentions of first and second user parties. By contrast, Ferstenberg teaches separate offer and allocation. The offer may be unified but it is between the users and the intermediary, and the allocation may be unified but it is between the users and the intermediary. There is no teaching of a unified user intention formed by merging the intentions of the first and second user parties. Although Ferstenberg hints at direct negotiation in the simple case there is no hint as to how this would be done.

In respect of feature d) Ferstenberg merely collocates the buyers and collocates the sellers. There is no comparison of buyers intentions with sellers intentions and indeed no one user's intentions are compared with those of any other user.

In respect of step e) there is no establishment of anything if intentions match. All Ferstenberg teaches is scaling between supply and demand via an intermediary.

There is no negotiation and no matching.

It is thus believed that claim 1 is both novel and inventive over the prior art and respectfully maintained that the claim should be allowed, for all the above reasons.

Claim 30 teaches:

A system for at least semi-automatically directly negotiating a relationship between a plurality of user parties in respect of components taking a value, said negotiating being without an intermediary, the system comprising:

(a) a plurality of user party modules, including at least a first user party module and a second user party module, each user party module featuring a user intention for determining the relationship, said user intentions respectively featuring a plurality of components in common to be determined for the relationship and respective values,

such that a process of negotiation matches said user intention of said first user party module to said user intention of said second user party module to provide a value agreed between users for said plurality of components; and

(b) a central server configured for at least initially connecting at least said first user party module to at least said second user party module for performing said direct negotiations to reach said agreed value, said negotiating comprising generating a common user intention by merging of said respective user party intentions. Claim 30 as amended likewise specifies that the intentions are those of the user party modules, and thus comparisons or agreements between a user party and an electronic intermediary are believed to be excluded. More specifically, regarding feature a) Ferstenberg fails to teach comparison between user intentions in order to arrive at an agreed value. On the contrary Ferstenberg merely uses supply and demand to scale the value so that supply matches demand. As regards b) Ferstenberg fails to teach a central server that connects user party modules to each other to perform direct negotiations to reach agreement. Rather Ferstenberg teaches connection of all users to an electronic intermediary. Although Fertenberg hints at direct negotiation between two e-agents there is no hint that it is to be carried out in accordance with the features of the present claims.

Claim 38 teaches:

A method for at least semi-automatically directly negotiating a relationship between at least a first user party and a second user party, the relationship relating to components, the negotiating being without an intermediary, the method being performed by a data processor, the method comprising:

(a) providing a first intention for the first user party and a second intention for the second user party, each of said first intention and said second intention featuring a plurality of components;

- (b) providing at least one computational device, said computational device being configured for defining an additional component for at least the first user party;
- (c) comparing said first intention to said second intention;
- (d) if said first intention is different than said second intention, defining said additional component using said at least one computational device by the first party;
- (e) sending at least one message from the first party to the second party, said at least one message including said additional component;
- (f) determining if said additional component is accepted by the second party;
- (g) if said additional component is accepted by the second party, adding said additional component to said first intention for the first party and to said second intention for the second party;
- (h) repeating step (c) at least once; and
- (i) if said first intention matches said second intention, then merging the respective first and second intentions to form a common user intention, and determining the relationship according to said common user intention.

As regards claim 38 Ferstenberg fails to teach feature b) since there is no computational device for adding a component to a user's intention. Users' intentions in Ferstenberg remain fixed. What is changed is the numbers of components allocated. Of course no user of an exchange system is going to agree to receive more components than ordered. By contrast in a direct negotiation system individual users may agree to take more components in return for something else that is part of the negotiation.

It is noted that the computational device is part of an intention that encodes the definition of a process in which the intention may be modified. Ferestenberg has nothing of the kind. His process is 'hard wired'. In the present embodiment, traders can define the process of doing business.

Furthermore, the inventor adds that in the present embodiments one trader can look at his opposite number's computational device, or be allowed to watch portions thereof, and see whether he would like to be involved in a negotiation process with the latter – In other words the computational device is *examinable* as is the negotiating party's intention.

Regarding feature c) Ferstenberg fails to teach comparing the first intention to the second intention, since the claim now specifies that these are user intentions.

Rather all intentions are compared to the electronic intermediary in Ferstenberg.

Regarding feature d) Ferstenberg fails to teach suggestion of giving a party the opportunity to add a component to that party's intention, certainly not by providing him with a computer interface configured for responding to the comparison in step c).

Regarding feature e) Ferstenberg fails to teach sending a message between one user and another user since all of Ferstenberg's messages either begin or terminate at the electronic intermediary. It is further noted that the message exchanges taught by Ferstenberg are choreographed by the intermediary and are subject to stringent time constraints. In contrast, the messages of the direct negotiations of the present invention provide a strategic device in negotiation posturing wherein the parties each control when and whether to send a message. Additionally, in Ferstenberg, no message reports the added component as defined by the claim since Ferstenberg teaches no such component.

Regarding feature f) there is no determining whether an additional component has been accepted by a second party since the buyers of Ferstenberg deal only with the in there is no hint or suggestion in Ferstenberg to carry out these steps.

Although Fertenberg hints at direct negotiation between two e-agents there is no hint that it is to be carried out in accordance with the features of the present claims.

Claim 40 teaches:

- 40. For use in a system for at least semi-automatically directly negotiating a relationship between a first user party and a second user party, each of the first user party and the second user party having a first user intention and a second user intention, respectively, such that the relationship is negotiated by matching the first user intention and the second user intention, a device operated by at least one of the first user party and the second user party, the device comprising:
- (a) an intention data structure configured for holding an intention;
- (b) a negotiation control program configured for controlling a process of negotiation between said users; and
- (c) a unifier, associated with said negotiation control program, configured to unify said user intentions via said intention data structure via said process of negotiation between users to form a merged user intention within said data structure, said merged user intention unifying said respective first and second intentions, therefrom to define the relationship.

Regarding feature b) Ferstenberg fails to teach a negotiation control program configured for controlling a process of negotiation between users. Rather Ferstenberg teaches negotiation between users on the one hand and the electronic intermediary on the other. Although Fertenberg hints at direct negotiation between two e-agents there is no hint that it is to be carried out in accordance with the features of the present claims as follows:

As regards feature c) Ferstenberg fails to teach a unifier which unifies user intentions, since there is no unification between different user intentions in

Ferstenberg. Furthermore Ferstenberg fails to teach the direct negotiation between users which are the basis of the unification in c).

Claim 42 has been amended to more positively recite the subject matter applicant wishes to claim:

A method of creating a minimizing goal for a level within a goal program, the method comprising the steps of:

- (a) providing a goal program having a plurality of levels, at least some of said levels comprising constraints;
- (b) identifying constraints within a respective level;
- (c) normalizing each of said identified constraints so as to obtain normalized constraints; and
- (d) combining said normalized constraints to created said minimized goal for said level.

In respect of claim 42 Ferstenberg fails to teach a goal program. A goal program is a specific form of mathematical program that allows user specifications to be expressed, and goal programs allow weighting, non-stringent constraints, and conflicting objectives, see discussion briding pages 40 and 41 of the present application. Ferstenberg neither uses the term "goal program" nor does he use any formula that could be recognized as a goal program. Ferstenberg does not use a formula that includes levels, and certainly does not teach that the levels may include constraints, as required by the claim. Examiner refers to the passage from column 31 line 40 to column 33 line 15 regarding the feature of 'identifying constraints within said level'. While the passage does refer to "tiering constraints" this relates to a constraint that is applied in order to protect a user's anonymity – see table 5, it involves arranging the agents in subsets and has nothing to do with a goal program. This contrasts with the claimed feature of the goal program having layers, in one of which layers constraints are found.

The Examiner points to Ferstenberg column 32 to column 43 to teach normalizing constraints. However the passage referred to does not teach normalizing of constraints. Normalizing constraints is a mathematical process in which different

constraints (e.g., one on color, one on date and another on price) are scaled so that they can be compared with each other (that is, enabling comparing 'apples' with 'oranges'). The passage cited has nothing to do with constraints and normalizing, certainly not to do with normalizing the constraints found at a particular level in a goal program. Rather the cited passage in Ferstenberg teaches fair allocation of commodities.

The final feature of claim 42 requires combining said normalized constraints to created said minimized goal for said level. This constrasts with Ferstenberg where it is true that constraints are solved, but they are not solved by minimization to create a minimized goal. Rather in Ferstenberg the constraints are satisfied in order to produce a trade. In the present claim the outcome of producing a minimized goal is to provide an improved negotiation position. Ferstenberg merely produces a trade.

Claim 42 as amended is therefore believed to be inventively distinguished over Ferstenberg.

The remaining claims mentioned in this section of the Office Action are believed to be allowable as being dependent on an allowable main claim.

All of the matters raised by the Examiner have been dealt with and are believed to have been overcome.

In view of the foregoing, it is respectfully submitted that all the claims now pending in the application are allowable. An early Notice of Allowance is therefore respectfully requested.

Respectfully submitted,

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Enclosures:

• Petition for Extension (One Month)